11. Assessment of the other flatfish stock complex in the Bering Sea and Aleutian Islands

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[NOTE: In accordance with the approved schedule, no assessment was conducted for this stock this year, however, a full stock assessment will be conducted in 2020. Until then, the values generated from the previous stock assessment (below) will be rolled over for 2020 specifications]

Executive Summary

Summary of Results

Species of the BSAI Other Flatfish complex are managed on a four year assessment cycle with the last full assessment conducted in 2015. For 2018 a partial assessment is completed. The partial assessment summary of the 2018 recommended ABCs and OFLs (in bold) relative to the 2017 recommendations for Other flatfish in the Bering Sea/Aleutian Islands (BSAI) is as follows:

	As estimated or specified last year for:		As estimated or recommended this year for:	
Quantity	2018	2019	2019	2020
M (natural mortality rate) for rex sole	0.17	0.17	0.17	0.17
M (natural mortality rate) for Dover sole	0.085	0.085	0.085	0.085
M (natural mortality rate) for all others	0.15	0.15	0.15	0.15
Tier	5	5	5	5
RE Model Combined Biomass (t)	113,450	113,450	141,325	141,325
$F_{OFL}(F=M)$ for rex sole	0.17	0.17	0.17	0.17
$F_{OFL}(F=M)$ for Dover sole	0.085	0.085	0.085	0.085
Fofl (F=M) for all other species	0.15	0.15	0.15	0.15
maxF _{ABC} for rex sole	0.128	0.128	0.128	0.128
maxFabc for Dover sole	0.064	0.064	0.064	0.064
maxF _{ABC} for all other species	0.113	0.113	0.113	0.113
FABC for rex sole	0.128	0.128	0.128	0.13
FABC for Dover sole	0.064	0.064	0.064	0.064
FABC for all other species	0.113	0.113	0.113	0.113
OFL (t)	17,591	17,414	21,824	21,824
maxABC (t)	13,193	13,061	16,368	16,368
ABC (t)	13,193	13,061	16,368	16,368
	As determined <i>last</i> year for:		As determined <i>this</i> year for:	
Status	2016	2017	2017	2018
Overfishing	n/a	n/a	n/a	n/a

Surveys were conducted on the Bering Sea shelf and the Aleutian Islands in 2018 and biomass estimates were updated for species of the "Other Flatfish" management category for this partial assessment according to the species groupings by natural mortality rate as detailed in the 2015 assessment (Wilderbuer and Nichol 2015). The random effects model was fit to the new survey estimates (and time-series) and resulted in an ABC and OFL increase of 24% over 2017. The 2018 values were rolled-over from the previous year (ie. the 2017 recommended ABC and OFL) and did not include a random effects model estimate of biomass. The Random Effects model estimates indicate that the Other Flatfish species group is at a high level relative to the time series of abundance estimates and is lightly exploited.

